

Remote ischemic conditioning Improves pre-PPCI TIMI flow and after-PPCI TIMI flow and ST resolution in patient with STEMI

Introduction: Remote ischemic conditioning (RIC) in a patient with myocardial infarction with ST segment elevation that is a candidate for primary percutaneous coronary intervention may decrease the complications of myocardial revascularization, and may have a protective effect on myocardial tissue.

Methods: A total of 110 STEMI and primary PCI candidates were randomly assigned into two groups of control and intervention, randomly divided into groups. In the intervention group, the cuff of the barometer was closed to the patient's right arm in 4 episodes of 5 minutes, which inflated 200 mm Hg then deflated and the group controls were subjected to PPCI and then the changes in ST and TIMI flow, the area under the curve of myocardial enzymes (CPK, CPKMB, Troponin) were evaluated within 72 hours and the results were compared in two groups.

Results: Our study showed that there is a significant difference in the TIMI flow rate in the upper limb with the onset of transient ischemia (after rhomacousysis) in the control and intermediate groups (p -value <0.001) and in the intervention group TIMI flow initial And the final one was more than the control group. There was a significant difference between the two groups in terms of ST changes between the two groups after the intervention. The decrease in ST segment was more than 50% in 96.4% in the intervention group compared to 58.2% in the control group (p -value <0.001). According to myocardial enzymes, tendency to decrease Trend towards There were no statistically significant differences between the three enzymes in the intervention group more than the control group Budama in terms of the level below the curve.

Conclusion: Our study showed that performing RIC in patients with myocardial infarction can improve the blood flow of the infarct region through TIMI flow and reduce the complications of myocardial infarction, including decreasing the size of the infarction and the possibility of a better microcirculation, due to the tendency to decrease myocardial enzymes and ST reduction.

Key words: STEMI, primary PCI, myocardial enzymes, TIMI flow ,RIC